nstitute of Geophysics & Planetary Physics -awrence Livermore National Laboratory—University of California

Guidelines for Proposals

University Collaborative Research Program (UCRP)

DEADLINE: April 9, 2001

Proposals received after this date will not be accepted.

Goals

One of the primary goals of the Institute of Geophysics and Planetary Physics (IGPP) at Lawrence Livermore National Laboratory (LLNL) is to enhance the opportunities of UC campus researchers and other academics by making available some of LLNL's unique facilities and expertise—such as large-scale supercomputing and high energy-density experimental facilities—and by broadening the scientific scope of the Laboratory researchers by encouraging collaborative and interdisciplinary work with campus scientists.

The core of IGPP/LLNL's scientific program is the University Collaborative Research Program (UCRP). This program provides support to scientists for research projects, primarily in the areas of astrophysics and geosciences, which include high-pressure research relevant to the Earth and planetary interior. Fields represented in astrophysics projects include research in stellar evolution, hydrodynamics, radiation transport theory, dark matter, adaptive optics, high redshift structure formation, and primitive solar system bodies. Fields represented in geosciences include seismology, geochemistry, geophysics, cosmochemistry, and dynamic and static experimental measurements on planetary materials in the range 0.001–1 Mbar.

Scientific communication is fostered between the campus and the Laboratory investigators by encouraging them to establish contact, to co-author their proposal, and to collaborate in the research project with one or more Laboratory researchers having expertise or interest in their area of study. It also is expected that results of UCRP supported reseach will be presented at the Annual System-wide IGPP meeting. Campus scientists are encouraged to telephone the Center Heads for help in establishing appropriate Laboratory contacts.

Astrophysics Research Center

Kem Cook (925) 423-4634 kcook@llnl.gov **Center for Geosciences**

Frederick (Rick) Ryerson (925) 422-6170 ryerson@llnl.gov

Project Period

The UCRP project period is 10/1/01–9/30/02. Principal Investigators (PIs) will be notified of award decisions by mid-June 2001.

Funding

The UCRP projects are financed by funds jointly provided by the Regents of the University of California and LLNL. In the past, funding for individual projects has ranged from \$5,000 to \$30,000. This support is used for a variety of purposes, including:

- salary support for graduate students and/or postdoctoral researchers doing the research,
- supplies for experimental facilities,
- LLNL computing facilities,
- travel costs to LLNL (which will remain at LLNL),
- geophysical and geochemical field work and astronomical observing.

Support for other types of research expenses may be appropriate if the proposed work is consistent with the goals described above. (This list is intended to be illustrative rather than exhaustive.)

"Starting FY00, LLNL will contribute 10% of the total award to UC researchers to the U.C. Vice Chancellor of Research (VCOR) for his/her discretionary use. This fee will be sent directly to the U.C. VCOR at your campus by our sponsor, the University Relations program office. The award amount shown above is the campus allocation. It is the full amount available to you, the campus PI, for research. The amount to you is not affected by the LLNL contribution to your VCOR."

Administrative costs are *not* supported.

Proposal Format

The following elements are required for all proposals. The time lost in waiting for missing elements may result in delays that could eliminate the proposal from consideration.

Title Page

See Attachment I for a sample Title Page. The Title Page for all proposals *must* identify both a campus researcher and an LLNL staff member as the Principal Investigators (PIs). Other participants are:

Campus: Contracts and Grants Officer
Department Business Manager
Department Head
Student(s) and Postdoc(s)

LLNL: Department or Division Head

For all participants listed, include department name, address with mail stop, city, state, zip code, telephone and fax numbers with area code, and email address.

A signature is *required* for all campus participants [except student(s)] listed on the Title Page. If the Campus requires additional approvals, these signatures must also appear on the Title Page.

Abstract

Please provide a summary of your proposal, not to exceed one page.

Scientific Text (4 pages maximum)

The 4-page maximum for scientific text will be strictly adhered to. Additional pages may be ignored. (Figures and Tables will not count toward the 4-page maximum; however, please limit these to no more than 3 pages.)

In the scientific text, describe:

- student(s) and researcher(s) involved.
- anticipated scientific product,
- scientific motivation,
- nature of the proposed work,
- where and how the work will be performed,
- why the proposed work is new, interesting, and/or potentially valuable.

In the case of long-term research programs that could extend many years into the future, the investigators are encouraged to make enough progress under IGPP/LLNL sponsorship that they can make a convincing case for obtaining other funding, either from external agencies or from other LLNL programs.

References

List all references cited in the scientific text.

Vita and Publications

Provide an abbreviated Vita, *not to exceed one page per person*, for all researchers (including students & postdocs) involved, both campus and LLNL. Also provide a list of *not more than five publications* that apply best to the proposal.

Budget

See Attachment II for a sample Budget Page. The proposed budget must list expenses by category. Provide details and projected costs for supplies and equipment items. Domestic travel should list purpose and destination for each trip. Overhead costs are not allowed and a non-UC proposal shall include a statement acknowledging this signed by the appropriate financial officer.

Do not include computer hardware and software costs, capital equipment, publication costs, or administrative salaries.

Mail Reviewers

Submit names of three potential mail reviewers. Include institution name, address, city, state, zip code, email address, and telephone number with area code. Mail reviewers need to comment only on the scientific text of the proposal.

Mail reviewers cannot be affiliated with the proposer's home institution or LLNL.

LLNL Memo

A 1-page memo from the LLNL collaborator is required. This memo should describe the LLNL co-PI's expected role in the proposed research, as well as the contributions the LLNL co-PI expects to make. This memo must also be signed by the LLNL co-PI's division or department head.

This memo may be sent directly by the LLNL collaborator, or it may be submitted by the Campus PI as part of the proposal package.

Renewal Proposals

Proposals submitted for renewal funding must include an additional 1- to 2-page status report that outlines progress made, lists all joint papers prepared for publication during the previous funding cycle, and describes the nature of the collaboration with LLNL.

We recognize that some overhead time is necessary to become familiar with a new experimental facility, to learn to make full use of a new supercomputer, and to develop a new research collaboration to the point where it is fruitful. Therefore, it is expected that many of the research projects that begin under the IGPP–LLNL UCRP may need to continue for more than one year. This must be reflected in the submission of proposals for renewal.

Mailing Instructions

Submit an original and 15 copies by close of business on April 9, 2001, to:

Lupe M. Gonzales IGPP/LLNL 7000 East Avenue, L-413 Livermore, CA 94550

If you have questions regarding this UCRP process, please contact Lupe Gonzales at (925) 424-5201 or via email at gonzales15@llnl.gov.

Check-List for Proposals

Title Page (with all signatures)	 Budget	
Abstract	 Mail Reviewers	
Scientific Text	 LLNL Memo (may be attached	
References	 to the proposal or sent by LLNL Co-I)	
Vita/Publications (all participants)	 Summary Report (if renewal proposal)	

Proposal Ranking

In addition to the mail review, proposals are ranked by an expert panel appropriate to each field. Each proposal is ranked numerically according to three criteria:

- 1. Scientific excellence.
- 2. Vitality of the collaboration.
- 3. Use of unique facilities.

The following "calibration" of the 1–5 ranking scale is used by our reviewers as a guide.

- Rank 5: Both of "outstanding" scientific quality and fully consistent with the goals of the IGPP–LLNL to provide meaningful research collaboration between campus and LLNL scientists.
- Rank 3: (a) Of "outstanding" scientific quality in the IGPP–LLNL research areas, but at present lacking in substantial collaboration between LLNL and campus researchers,

- -OR- (b) Of "very good" scientific quality, with at least some collaboration between campus and LLNL scientists,
- -OR- (c) Of "outstanding" scientific quality in a field other than IGPP–LLNL research areas, but making use of a unique LLNL resource that would be otherwise unavailable.
- **Rank 1:** Of either "fair" or "poor" scientific quality, regardless of the potential for collaboration.

The use of these Ranks is intended to produce a distribution of scores with a mean score of 3.

Attachment I Sample Title Page

Proposal Title			
New	Renewal	(IGPP Grant #)	
Student(s):		Research Area: Astrophysics Geosciences	
		Total Amount Requested: \$	
Campus (Signatures Req	quired)	
Complete Name, Titl Campus Name, Depa Address w/Mail Stop City, State, Zip Code Telephone, Fax Num email address	p e	Complete Name, Title (Department Head) Campus Name, Department Address w/Mail Stop City, State, Zip Code Telephone, Fax Numbers email address	
Complete Name, Titl Campus Name, Depa Address w/Mail Stop City, State, Zip Code Telephone, Fax Num	p e abers	Complete Name, Title (Dept. Business Manager) Campus Name, Department Address w/Mail Stop City, State, Zip Code Telephone, Fax Numbers	

LLNL (Identify Only)

(No LLNL signatures are required on the title page; however, signatures of the LLNL co-PI and his/her Department or Division Head must appear on the LLNL memo.)

Complete Name, Title (**Co-Investigator**) Department L-Code Telephone, Fax Numbers email address Complete Name, Title (**Department or Div. Head**)
Department
L-Code
Telephone, Fax Numbers
email address

Attachment II Sample Budget Page

Campus LLNL Total

Salaries (List All Names)

Employee Benefits

(provide breakdown)

Supplies & Expenses

(provide breakdown)

Travel

Campus to LLNL (Round Trip) Per-diem (# of days) Car Rental/Ground Transportation

GRAND TOTAL